



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220F Plastic-Encapsulate Voltage Regulator**CJ7915F** Three-terminal negative voltage regulator**FEATURES**

Maximum Output Current

 I_{OM} : 1.5 A

Output voltage

 V_o : -15 V**TO-220F**

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1. GND
 2. IN
 3. OUT

ABSOLUTE MAXIMUM RATINGS (operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Operating Junction Temperature Range	T_{OPR}	0-+125	°C
Storage Temperature Range	T_{STG}	-55-+150	°C

ELECTRICAL CHARACTERISTICS (V_i :-23V, I_o = 500mA, $0^{\circ}\text{C}<T_J<125^{\circ}\text{C}$, C_i =2 μ F, C_o =1 μ F, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_J=25^{\circ}\text{C}$	-14.4	-15	-15.6	V
		$-17.5\text{V}\leq V_i\leq -30\text{V}$, $I_o=5\text{mA}-1\text{A}$ $P\leq 15\text{W}$	-14.25	-15	-15.75	V
Load Regulation	ΔV_o	$T_J=25^{\circ}\text{C}$, $I_o=5\text{mA}-1.5\text{A}$		15	200	mV
		$T_J=25^{\circ}\text{C}$, $I_o=250\text{mA}-750\text{mA}$		5	75	mV
Line regulation	ΔV_o	$-17.5\text{V}\leq V_i\leq -30\text{V}$, $T_J=25^{\circ}\text{C}$		5	100	mV
		$-20\text{V}\leq V_i\leq -26\text{V}$, $T_J=25^{\circ}\text{C}$		3	50	mV
Quiescent Current	I_q	$T_J=25^{\circ}\text{C}$		2	3	mA
Quiescent Current Change	ΔI_q	$-17.5\text{V}\leq V_i\leq -30\text{V}$			0.5	mA
	ΔI_q	$5\text{mA}\leq I_o\leq 1\text{A}$			0.5	mA
Output Noise Voltage	V_N	$10\text{Hz}\leq f\leq 100\text{KHz}$		375		μV
Ripple Rejection	RR	$-18.5\text{V}\leq V_i\leq -28.5\text{V}$, $f=120\text{Hz}$, $T_J=25^{\circ}\text{C}$	54	60		dB
Dropout Voltage	V_d	$T_J=25^{\circ}\text{C}$, $I_o=1\text{A}$		1.1		V
Peak Current	I_{pk}	$T_J=25^{\circ}\text{C}$		2.1		A

TYPICAL APPLICATION